

**PATENT APPLICATION
DOCKET NO. 10007465-1**

**IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE**

INVENTOR(S) : Travis J. Parry

GROUP ART UNIT: 2617

SERIAL NO.: 09/802,665

EXAMINER: Phan, Huy Q.

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SUBJECT: METHODS AND SYSTEMS FOR CONTROLLING MULTIPLE
COMPUTING DEVICES

APPELLANTS'/APPLICANTS' OPENING BRIEF ON APPEAL

1. REAL PARTY IN INTEREST.

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holding, LLC.

2. RELATED APPEALS AND INTERFERENCES.

There are no other appeals or interferences known to Appellants, Appellants' legal representative or the Assignee which will affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS.

Claims 1-23 and 25 are pending and stand rejected. All pending claims are appealed.

4. STATUS OF AMENDMENTS.

No amendments have been filed after the final action was entered. All previous amendments have been entered.

5. SUMMARY OF CLAIMED SUBJECT MATTER.

Claim 1 recites switching device. The device includes a transmitter and a receiver. See, e.g., Specification, page 6, lines 12-22 and Fig. 3. The transmitter and receiver are operable to provide wireless communication (1) between the switching device and a selected one of a plurality of available computing devices and (2) between the switching device and a peripheral device. See, e.g., Specification, page 7, lines 11 through page 9, line 2 and Fig. 4. The device also includes a computer readable medium and a processor for executing instructions stored by the computer readable medium. See, e.g.,

Specification, page 6, line 23 through page 7, line 5 and Fig. 3 reference numbers 306 and 308. The computer readable medium has instructions for:

- a. maintaining a list of the available computing devices;
- b. receiving a user communication selecting from among the list of available computing devices; and
- c. utilizing the transmitter and the receiver to establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices.

See, e.g., Specification, page 6, line 23 through page 7, line 5 and page 7, lines 11 through page 9, line 2 and Fig. 4.

Claim 10 is directed to a computing system. The system includes multiple computing devices. See, e.g., Specification, page 9, lines 5-8 and Fig. 5. Each computing device is configured for wireless communication. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The system includes one or more peripheral devices configured to wirelessly receive and/or transmit data. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The system also includes a switching device. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The switching device is configured to a number of tasks. Those tasks include:

- (1) maintaining a list of available computing devices from among the multiple computing devices;
- (2) receiving a user communication selecting from among the list of available computing devices); and
- (3) establishing a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling wireless user interaction.

See, e.g., Specification, page 8, lines 6-27 and Figs 4 and 5

Claim 16 is directed to a computing system. That system includes multiple computing devices. See, e.g., Specification, page 9, lines 5-8 and Fig. 5. Each computing device is configured for wireless communication. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The system also includes one or more peripheral devices configured to wirelessly receive and/or transmit data and linkable with the computing devices for data exchange. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The system also includes a switching device. See, e.g., Specification, page 9, lines 5-18 and Fig. 5. The switching device is configured to a number of tasks. Those tasks include:

- (1) wirelessly receiving and transmitting data from and to the peripherals and the computing devices (see, e.g., Specification, page 7, lines 11 through page 9, line 2 and Fig. 4.;
- (2) maintaining a list of available computing devices from among the multiple computing devices (see, e.g., Specification, page 8, lines 1-6 and Fig. 4);
- (3) receiving a user communication selecting from among the list of available computing devices (see, e.g., Specification, page 8, lines 6-27); and
- (4) establishing a first wireless link between the one or more peripheral devices and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling user interaction with the computing devices (see, e.g., Specification, page 8, lines 6-27 and Figs 4 and 5).

Claim 21 is directed to a method of controlling multiple computing devices utilizing a switching device. The method includes establishing a first wireless link with a peripheral device. See, e.g., Specification, page 8, lines 6-9 and Fig. 5 (note the communication links between the switching device (300) and the various peripheral devices). A list of available computing devices is maintained. See, e.g., Specification, page 8, lines 1-6 and Fig. 4. Data is received from a user. See, e.g., Specification, page 8, lines 6-27. That data is associated with a user selection of an available computing device from the list. See, e.g., Specification, page 8, lines 6-27. The received data is used to select a computing device. See, e.g., Specification, page 8, lines 6-27. A second wireless link is established with the

selected computing device. See, e.g., Specification, page 8, lines 6-27. The user is thus permitted to interact with the selected computing device via said first and second wireless links. See, e.g., Specification, page 8, lines 6-27.

Claim 25 is directed to one or more readable media having instructions which, when executed by a switching device, cause the switching device to perform a number of acts. Those acts include:

1. establishing a first wireless link with a peripheral device (see, e.g., Specification, page 8, lines 6-9 and Fig. 5 (note the communication links between the switching device (300) and the various peripheral devices));
2. maintaining a list of available computing devices (see, e.g., Specification, page 8, lines 1-6 and Fig. 4);
3. wirelessly receiving data from a user, the data being associated with a user selection from the list of available computing devices (see, e.g., Specification, page 8, lines 6-27);
4. using the received data to select a computing device (see, e.g., Specification, page 8, lines 6-27);
5. establishing a second wireless link with the selected computing device (see, e.g., Specification, page 8, lines 6-27); and
6. permitting the user to interact with said one computing device via said first and second wireless links (see, e.g., Specification, page 8, lines 6-27).

6. GROUNDS FOR REJECTION TO BE REVIEWED.

A. Claims 1-23 and 25 were rejected under 35 U.S.C. §103 as being unpatentable over USPN 6,671,756 issued to Thomas in view of USPN 6,131,130 issued to Van Ryzin

7. ARGUMENT.

A. Ground For Rejection A – Claims 1-23 and 25 were rejected under 35 U.S.C. §103 as being unpatentable over USPN 6,671,756 issued to Thomas in view of USPN 6,131,130 issued to Van Ryzin.

Claim 1 is directed to a switching device that includes the following combination of elements:

2. a transmitter and a receiver operable to provide wireless communication between the switching device and a selected one of a plurality of available computing devices and between the switching device and a peripheral device;
3. a computer readable medium having instructions for:
 - a. maintaining a list of the available computing devices;
 - b. receiving a user communication selecting from among the list of available computing devices; and
 - c. utilizing the transmitter and the receiver to establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices;
4. a processor operable to execute the instructions.

With respect to the first element above and without explanation of the components responsible for the tasks, the Examiner also asserts, citing Thomas, col. 4, lines 10-13, that Thomas teaches a transmitter and receiver operable to provide wireless communication “between the switching device and a peripheral device.”

The Examiner also contends that Thomas teaches a transmitter and a receiver operable to provide a “second communication link” between the switching device and a selected one of a plurality of available computing devices.” More particularly, the Examiner, citing Thomas, col. 5, lines 55-60 and Fig. 2, asserts that Thomas’ switch (2) “receives (receiver) the keyboard/mouse signals, makes appropriate translations, and delivers (transmitter) them to a selected computer.”

The Examiner admits that Thomas fails to teach that “the second communication link is a wireless link” – that is – the communication link between the switching device and the selected one of the plurality of computing devices. The Examiner proposes that a modification of Thomas based on the teachings of Van Ryzin would remedy this deficiency.

Even if the Examiner’s reliance on Van Ryzin was properly placed, the combination of Thomas and Van Ryzin do not teach or suggest a switching device that includes a transmitter and receiver pair having the capabilities recited by the first element of Claim 1. Claim 1 recites a switching device that includes a transmitter and receiver that are operable to provide wireless communication between the switching device and a selected one of a plurality of available computing devices. That same transmitter and receiver are also operable to provide wireless communication between the switching device and a peripheral device. For an exemplary illustration, the reader’s attention is drawn to Fig. 3 of the present application.

As will be made clear below, even if Thomas could properly be modified by Van Ryzin, such a modification would result in a switching device having a first transmitter and receiver pair for communicating with a peripheral device and a second transmitter and receiver pair capable of communication with a computing device.

With regard to a switching device with a transmitter and receiver capable of wireless communication with a peripheral, Thomas mentions the use of wireless communications only once and that is in its background/summary section at col. 2, lines 1-14. In that particular passage, Thomas describes a KVM switchbox that provides access to a local user and a remote user. The remote user preferably communicates with the KVM switch box via a CAT5 cable. Alternatively, the KVM switchbox may employ a wireless connection between the remote user and the KVM switchbox.

This passage is taken from the background/summary and by itself provides very little insight as to what Thomas is actually describing. To get a true understanding, one must look at Thomas as a whole and take the time to delve into the Specification. Attention is specifically drawn to col. 3, lines 37-52, col. 4, lines 8-16; col. 5, lines 10-35, col. 7, line 61 through col. 8, line 4, and Figs. 1-3 and 8. Figs. 1-3 and 8 are reproduced below to help illustrate.

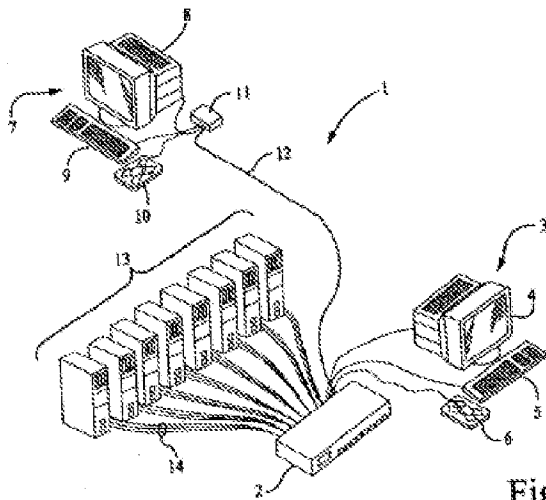


Fig. 1

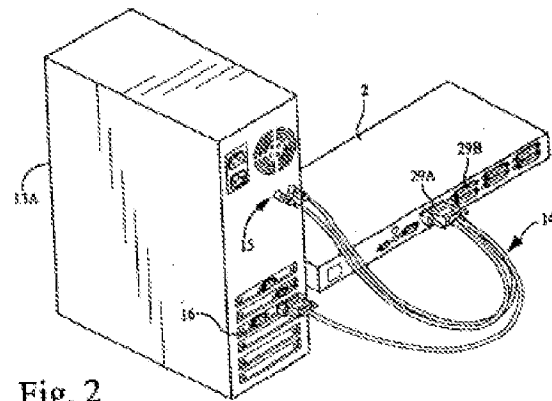


Fig. 2

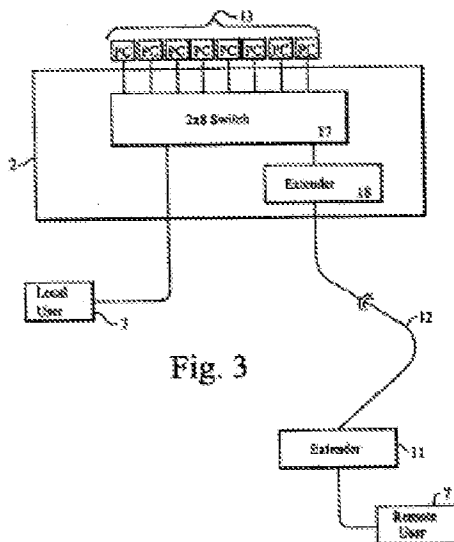


Fig. 3

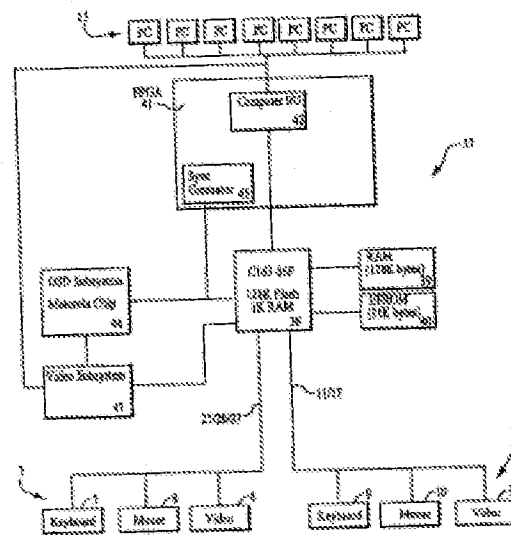


Fig. 8

Fig. 1 illustrates a distinction between a local user (3) and a remote user (7) of a KVM switch (2). The local user (2) has a monitor (4), keyboard (5), and pointing device (6) each directly connected to KVM switch (2). Thomas states that the local user (3) is to be located within 30 feet of KVM switch (2). The remote user (7) has monitor (8), keyboard (9), and pointing device (10) each directly connected to an extender product (11). That extender product (11) is then connected to KVM switch (2) at extender (18) via line (12). It is this line (12) that Thomas, at col. 2, lines 8-9, refers to when stating “the KVM switch can employ fibre optic, and integral waveguide, or wireless connection in lieu of the CAT5

connection.” Extender (18) is internal to switch (2) and communicates as a transmitter/receiver with the extender product (11). Thomas, col. 4, lines 8-16.

Thomas, Fig. 8 illustrates a KVM switch (37) that can communicate via line (12) with a remote user (7) via extender product (11) and arguably internal extender(18) (shown in Fig. 3). Switch (37) includes a single processor (38) that utilizes a computer I/O to provide communication between switch (37) and PCs (13). Thomas, col. 7, line 61 through col. 8, line 4.

To summarize, Thomas teaches a switch that utilizes two distinct transmitter/receiver pairs. The first is embodied in the extender (18) and is used for communications between the switch (2, 37) and the peripherals utilized by a remote user (7). The second transmitter/receiver pair is embodied in Thomas’ computer I/O (42) which provides communication between the switch (2, 37) and a PC (13).

Extender (18) is distinct and separate from the computer I/O (42). Even if Thomas’s computer I/O could be modified for wireless communication based on the teachings of Van Ryzin, the modified version of Thomas would still require two separate and distinct transmitter/receiver pairs – one for one communication link between the switch and a peripheral and another for a second communication link between the switch and a selected computer.

Consequently, the combination of Thomas’ and Van Ryzin fails to teach or suggest a switching device that includes a transmitter and a receiver operable to provide wireless communication between the switching device and a selected one of a plurality of available computing devices and between the switching device and a peripheral device. For at least this reason,

Because the combination of Thomas and Van Ryzin teach a switching device (2, 37) that includes two distinct and separate transmitter/receiver pairs, any instructions taught by the combination would include instructions for utilizing Thomas’ extender (18) (a first transmitter/receiver) to establish a first wireless link between a peripheral device used by a remote user (7) and the switching device (2, 37) and other instructions for utilizing Thomas’ computer I/O (42) (a second transmitter/receiver) to establish a second wireless link between the switching device (2, 37) and a computing device (13). Consequently, the combined references fails to teach a switching device that includes a computer readable medium having instructions for utilizing the transmitter and the receiver to establish a first

wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices.

For at least these reasons Claim 1 is patentable over Thomas and Schneider as are Claims 2-9 which depend from Claim 1.

Claim 10 is directed to a computing system and recites the following combination of elements:

1. multiple computing devices, each of which being configured for wireless communication;
2. one or more peripheral devices configured to wirelessly receive and/or transmit data; and
3. a switching device configured to:
 - a. maintain a list of available computing devices from among the multiple computing devices;
 - b. receive a user communication selecting from among the list of available computing devices; and
 - c. establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling wireless user interaction.

The Examiner admits that Thomas fails to teach or suggest a switching device that is configured to establish a second wireless link between the switching device and a computing device selected from a list of available computing devices. To remedy this deficiency, the Examiner proposes modifying the teachings of Thomas with the teachings of Van Ryzin.

As clarified above Thomas teaches a switch (2, 37) that implements a Computer I/O (42) to establish a communications link between the switch (2, 37) and a computing device (13). That link is not a wireless link.

Van Ryzin describes a PC (Personal Computer) board (14) that can be installed in a computer (2) to enable wireless communication between the computer (2) and a selected peripheral device (8-12). Van Ryzin's Figs. 1 and 3, reproduced below, help illustrate.

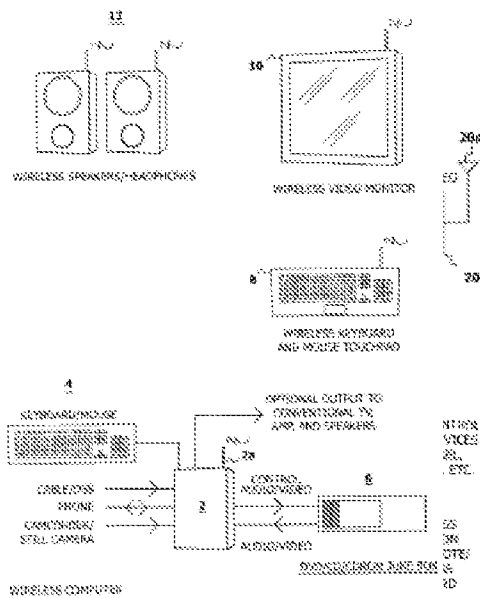


FIGURE 1

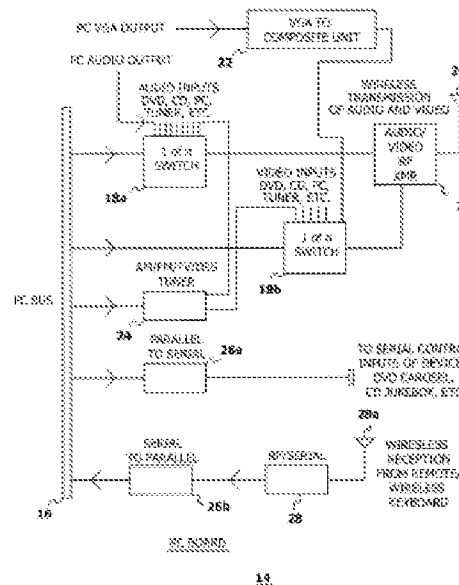


FIGURE 3

FIGURE 3

Van Ryzin's PC board (14) includes switches (18a) and (18b), an audio/video RF transmitter (20), and RF/serial converter (28). RF transmitter (20) is used for establishing communication between switches (18a), (18b) and wireless peripherals (10), (12). Converter (28) is used for establishing communications between PC board (14) and wireless peripheral (8). PC board is coupled to and communicates with computer (2) via a physically wired PC bus (16). There is no wireless communication between switches (18a), (18b) and computer (2). As such, Van Ryzen does not teach a wireless

communication between a switching device and a computer or the components that would be capable of such communication.

Therefore, Thomas, even when modified by the teachings of Van Ryzin, fails to teach or suggest a switching device configured to establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling wireless user interaction.

For at least these reasons, Claim 10 is patentable over the cited references as are Claims 11-15 which depend from Claim 10.

Claim 16 is directed to a computing system and recites the following:

1. multiple computing devices, each of which being configured for wireless communication;
2. one or more peripheral devices configured to wirelessly receive and/or transmit data and linkable with the computing devices for data exchange; and
 - a. a switching device configured to
 - b. wirelessly receive and transmit data from and to the peripherals and the computing devices;
 - c. maintain a list of available computing devices from among the multiple computing devices;
 - d. receive a user communication selecting from among the list of available computing devices; and
 - e. establish a first wireless link between the one or more peripheral devices and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling user interaction with the computing devices.

As with Claim 10, Thomas and Van Ryzin fail to teach or suggest a switching device configured to establish a first wireless link between the peripheral device and the

switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling wireless user interaction.

For at least the same reasons that Claim 10 is patentable over those references, so are Claim 16 and Claims 17-20 which depend from Claim 16.

Claim 21 is directed to a method of controlling multiple computing devices utilizing a switching device and recites the following acts:

1. establishing a first wireless link with a peripheral device;
2. maintaining a list of available computing devices;
3. receiving data from a user, the data being associated with a user selection of an available computing device from the list;
4. using the received data to select a computing device;
5. establishing a second wireless link with the selected computing device; and
6. permitting the user to interact with the selected computing device via said first and second wireless links.

As made clear above, Thomas and Van Ryzin fail to teach device and system components capable of establishing a second wireless link with a selected computing device so that a user is permitted to interact with the selected computing device via first and second wireless links. Consequently, those references also fail to teach or suggest a method in which a second wireless link is established with a selected computing device so that a user is permitted to interact with the selected computing device via first and second wireless links.

For at least these reasons, Claim 21 is patentable over Thomas and Van Ryzin as are Claims 22-23 which depend from Claim 21.

Claim 25 is directed to one or more readable media having instructions thereon which, when executed by a switching device, cause the switching device to:

1. establish a first wireless link with a peripheral device;
2. maintain a list of available computing devices;
3. wirelessly receive data from a user, the data being associated with a user selection from the list of available computing devices;
4. use the received data to select a computing device;
5. establish a second wireless link with the selected computing device; and
6. permit the user to interact with said one computing device via said first and second wireless links.

As made clear above, Thomas and Van Ryzin fail to teach device and system components capable of establishing a second wireless link with a selected computing device so that a user is permitted to interact with the selected computing device via first and second wireless links. Consequently, those references also fail to teach or suggest instructions for causing a switching device to establish a second wireless link with the selected computing device and permit a user to interact with the selected computing device via first and second wireless links.

For at least these reasons, Claim 25 is patentable over Thomas and Schneider.

For at least the reasons set forth above, the rejections of Claims 1-23 and 25 are improper as the Examiner has failed to establish a prima facie case of obviousness under 35 USC §103.

Respectfully submitted,
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Jack H. McKinney
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August 29, 2006

APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

1. (previously presented) A switching device comprising:
 - a transmitter and a receiver operable to provide wireless communication between the switching device and a selected one of a plurality of available computing devices and between the switching device and a peripheral device;
 - a computer readable medium having instructions for:
 - maintaining a list of the available computing devices;
 - receiving a user communication selecting from among the list of available computing devices; and
 - utilizing the transmitter and the receiver to establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices;
 - a processor operable to execute the instructions.
2. (previously presented) The switching device of claim 1, wherein the instructions for utilizing the transmitter and the receiver include instructions for utilizing the transmitter and receiver to establish the first wireless link between the switching device and a plurality of peripheral devices that can be used by a user to interact with the selected computing device.
3. (original) The switching device of claim 2, wherein said at least one peripheral device comprises a keyboard.
4. (original) The switching device of claim 2, wherein said at least one peripheral device comprises a mouse.
5. (original) The switching device of claim 2, wherein said at least one peripheral device comprises a display.

6. (original) The switching device of claim 2, wherein said at least one peripheral device comprises one or more of a keyboard, a mouse and a display.

7. (original) The switching device of claim 1, wherein the transmitter and receiver are configured to establish a wireless link via BlueTooth.

8. (original) The switching device of claim 1, wherein the transmitter and receiver comprise an integrated unit.

9. (previously presented) The switching device of claim 1 further comprising a storage device to maintain the list of available computing devices.

10. (previously presented) A computing system comprising:
multiple computing devices, each of which being configured for wireless communication;

one or more peripheral devices configured to wirelessly receive and/or transmit data; and

a switching device configured to:

maintain a list of available computing devices from among the multiple computing devices;

receive a user communication selecting from among the list of available computing devices; and

establish a first wireless link between the peripheral device and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling wireless user interaction.

11. (original) The computing system of claim 10, wherein the computing devices comprise desktop computers.

12. (original) The computing system of claim 10, wherein at least one of the peripheral devices comprises a keyboard.

13. (original) The computing system of claim 10, wherein at least one of the peripheral devices comprises a mouse.

14. (original) The computing system of claim 10, wherein at least one of the peripheral devices comprises a display.

15. (previously presented) The computing system of claim 10, wherein at least one of the peripheral devices comprises one or more of a keyboard, mouse or display.

16. (previously presented) A computing system comprising:
multiple computing devices, each of which being configured for wireless communication;
one or more peripheral devices configured to wirelessly receive and/or transmit data and linkable with the computing devices for data exchange; and
a switching device configured to
wirelessly receive and transmit data from and to the peripherals and the computing devices;
maintain a list of available computing devices from among the multiple computing devices;
receive a user communication selecting from among the list of available computing devices; and
establish a first wireless link between the one or more peripheral devices and the switching device and a second wireless link between the switching device and a computing device selected from the list of available computing devices enabling user interaction with the computing devices.

17. (original) The computing device of claim 16, wherein the computing devices comprise desktop computers.

18. (original) The computing device of claim 16, wherein at least one of the peripheral devices comprises a keyboard.

19. (original) The computing device of claim 16, wherein at least one of the peripheral devices comprises a mouse.

20. (original) The computing device of claim 16, wherein at least one of the peripheral devices comprises a display.

21. (previously presented) A method of controlling multiple computing devices utilizing a switching device, the method comprising:
establishing a first wireless link with a peripheral device;
maintaining a list of available computing devices;
receiving data from a user, the data being associated with a user selection of an available computing device from the list;
using the received data to select a computing device;
establishing a second wireless link with the selected computing device; and
permitting the user to interact with the selected computing device via said first and second wireless links.

22. (original) The method of claim 21, wherein said receiving comprises wirelessly receiving said data from the user.

23. (preciously presented) The method of claim 21, wherein said permitting comprises wirelessly receiving data from the peripheral device, the peripheral device comprising one or more of: a keyboard, a mouse and a display, and wirelessly transmitting the data to the selected computing device.

24. (cancelled)

25. (previously presented) One or more readable media having instructions thereon which, when executed by a switching device, cause the switching device to:

- establish a first wireless link with a peripheral device;
- maintain a list of available computing devices;
- wirelessly receive data from a user, the data being associated with a user selection from the list of available computing devices;
- use the received data to select a computing device;
- establish a second wireless link with the selected computing device; and
- permit the user to interact with said one computing device via said first and second wireless links.

Evidence Appendix

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

Related Proceedings Appendix

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.